

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Art Unit 3685
Geoffrey B. Rhoads Confirmation No. 9782
Application No.: 09/574,726
Filed: May 18, 2000
For: MUSIC METHODS AND SYSTEMS
Examiner: C. Agwumezie
Date: August 31, 2009

VIA ELECTRONIC FILING

SUMMARY OF CLAIMED SUBJECT MATTER

This submission is in response to the Notice Non-Compliant Appeal Brief dated July 30, 2009, requesting a supplemental "SUMMARY OF CLAIMED SUBJECT MATTER" for the Appeal Brief. The order from the BPAI mailed July 17, 2009, alleges that the 'Summary of the Claimed Subject Matter' appearing on pages 3-9 of the Appeal Brief, filed October 15, 2008, is deficient because it does not separately map independent claims 1, 8, 11 and 26 to the specification of this pending case. This statement is apparently in reference to the fact that the Appellant provided support for the claim language from a priority patent 5,862,260 at pages 3-9 of the Appeal Brief. It appears that the BPAI Review Team has not acknowledged that the citations to US Patent No. 5,862,260, do provide a mapping of the independent claims to the specification of this pending case because 5,862,260 is incorporated by reference in the specification as noted in the Appeal Brief and repeated below. Therefore, all of the citations from 5,862,260 are part of the specification of this pending case. It is also true, of course, that the specification provides examples of support for the claimed subject matter. To illustrate these examples, Appellant has added additional citations to the specification below. To make these new additions more clearly visible, they are underlined in text below.

In the Office Action dated January 3, 2005, the Office rejected claims 1-14 and 26-29 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,862,260 (the '260 patent). This application on appeal claims priority to and incorporates by reference the '260 patent. The '260

patent is referenced at page 1, line 22 of this application and is incorporated by references at page 40, lines 8-10 of the specification as filed. The following summary of the claimed subject matter includes references to the '260 patent that establish the priority of the claims at least as early as May 16, 1996, the filing date of the '260 patent. It also includes underlined citations to the specification as filed.

Claim 1 recites a method of distributing digital source material comprising:

passing encoded source material to a destination through at least one intervening steganographic decoder process (**'260 patent at col. 27, lines 34-41; '260 patent at col. 28, lines 45-49; and '260 patent col. 90, line 62 to col. 91, line 12; see specification at page 2, lines 6-8**),

the encoded source material comprising plural-bit auxiliary data steganographically embedded in the digital source material (**'260 patent at col. 27, lines 50-52; and '260 patent col. 90, line 62 to col. 91, line 12; see, e.g., page 2, lines 6-7**),

the digital source material including visual or audio signals that are perceptible when output from a device, and the visual or audio signals including imperceptible modifications to perceptible parts of the visual or audio signals to embed the plural-bit auxiliary data in the perceptible parts in a manner that is imperceptible to a user, the imperceptible modifications adaptively changing values of the perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts;

(See, for example, '260 patent at col. 3, lines 60-67, which discusses the level of the amplitude of the embedded signal in video or audio that keeps the embedded signal imperceptible to the viewer or listener. See also '260 patent col. 7, lines 6-17, which provide an embodiment for modifying samples (e.g., pixels) of the content signal by adaptively changing values of pixels by varying amounts that depend on the values of the pixels. See also, '260 patent at col. 15, line 46 to col. 16, line 67, which describes an embodiment for modifying samples of audio or video adaptively (computes a real time scale factor of the embedded signal as a function of the input audio or video data samples). Finally, see '260 patent at col. 22, lines 53-63, regarding the level of the embedded identification signal is

selected so that the embedded identification signal is imperceptible; see, e.g., specification at page 8, lines 8-15.

within said intervening steganographic decoder process, detecting encoded source material transmitted thereby ('260 patent at col. 27, lines 34-41; '260 patent at col. 28, lines 45-49; see, e.g., specification at page 2, lines 8-9); and

crediting a payment in response to said detection of the encoded source material, in accordance with the plural-bit auxiliary data steganographically conveyed by the encoded source material ('260 patent at col. 27, lines 34-41; '260 patent at col. 28, lines 45-49; and '260 patent col. 90, line 62 to col. 91, line 12; see, e.g., specification at page 2, lines 9-11).

Claim 2 recites the method of claim 1 which includes decoding plural-bit auxiliary data only from source material that has first been tested to indicate the likely presence of such auxiliary data therein ('260 patent col. 26, lines 15-25; see, e.g., specification at page 2, lines 14-15).

Claim 3 recites the method of claim 2 which includes testing source material by reference to an encoding attribute that is supplemental to said encoded plural-bit auxiliary data ('260 patent col. 16, lines 50-55; and '260 patent col. 74, lines 51-63; see, e.g., specification at page 2, lines 15-19).

Claim 4 recites the method of claim 3 in which the attribute is the presence of a characteristic signature signal conveyed by said source material ('260 patent col. 16, lines 50-55; and '260 patent col. 74, lines 51-63; see, e.g., specification at page 2, lines 18-19).

Claim 5 recites the method of claim 4 in which the signature signal is a repetitive noise burst signal ('260 patent fig. 9A, col. 27, line 46; col. 28, lines 24-40 and lines 50-53; col. 31, lines 45-48; see, e.g., specification at page 2, lines 18-19).

Claim 6 recites the method of claim 1 in which the passing includes distributing through a network of interconnected computers (**'260 patent col. 71, lines 49-59; see, e.g., specification at page 30, lines 11-18).**

Claim 7 recites the method of claim 1 reporting the detection to a location remote from detection; and crediting royalties based on detection (**'260 patent col. 71, lines 49-59, and col. 90, line 62 to col. 91, line 12; see, e.g., specification at page 2, lines 9-13).**

Claim 8 recites a method comprising:

presenting audio source material to a consumer (**'260 patent at col. 27, lines 31-34, col. 62, lines 39-46, col. 63, lines 6-22; see, e.g., specification at page 2, lines 21-22, and page 12, lines 8-11**), the material being encoded steganographically to convey plural-bit auxiliary data (**'260 patent at col. 27, lines 53-65, col. 62, lines 43-46; see, e.g., specification at page 2, lines 20-21**), the audio source material including an audio signal that is audible when output from a device, the audio signal including imperceptible modifications to embed the plural-bit auxiliary data that are imperceptible to the consumer, the imperceptible modifications changing values of audible parts of the audio signal (**see '260 patent at col. 22, lines 53-63, and also see comments for similar elements of claim 1; see, e.g., specification at page 8, lines 8-15**);

decoding the audio source material that is presented to the consumer to decode the auxiliary data therefrom (**'260 patent at col. 27, lines 34-44; see, e.g., specification at page 2, lines 21-22, and page 12, lines 11-12**); and

using the plural-bit auxiliary data to retrieve information about the source material from a remote location (**'260 patent at col. 27, lines 50-52, col. 28, lines 47-49, col. 63, lines 6-22; see, e.g., specification at page 2, lines 22-24, and page 12, lines 12-17**).

Claim 9 recites the method of claim 8 including:

storing data indicating the audio source material(s) presented to the consumer (**'260 patent col. 27, lines 36-53; see, e.g., specification at page 2, lines 24-25, and page 35, lines 1-10**);

generating a report based on the stored data, indicating the audio source material(s) presented to the consumer (**'260 patent at col. 27, lines 42-44; see, e.g., specification at page 2, lines 24-25, and page 35, lines 1-10).**

Claim 10 recites the method of claim 8 which includes detecting the presented audio source material with a microphone, and decoding the auxiliary data from the audio signal within a microphone output signal (**'260 patent at col. 27, lines 42-43; see, e.g., specification at page 18, lines 19-24).**

Claim 11 recites a method comprising:

receiving a digital object steganographically encoded with plural-bit auxiliary data (**'260 patent at col. 27, lines 31-34, col. 62, lines 39-46, col. 63, lines 6-22; see, e.g., specification at page 2, lines 28-29).** the digital object including perceptible visual or audio signals with imperceptible modifications that have been made to encode the plural-bit auxiliary data in the visual or audio signals of the object, the imperceptible modifications adaptively changing values of perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts (**see '260 patent at col. 22, lines 53-63, and also see comments for similar elements of claim 1; see, e.g., specification at page 8, lines 8-15).**

decoding the plural-bit auxiliary data from the object (**'260 patent at col. 28, lines 46-49; see, e.g., specification at page 2, lines 29-30).**

consulting a registry to determine a transaction associated with the object, by reference to said decoded plural-bit auxiliary data (**'260 patent at col. 26, line 47, col. 52, line 67, and col. 90, line 62 to col. 91, line 12; see, e.g., specification at page 2, lines 30-31).** and

making a payment in accordance with the transaction (**'260 patent col. 91, line 11; col. 27, lines 38-41, col. 26, lines 57-62 (cited by Office in the 1/05 anticipation rejection by the '260 patent); see, e.g., specification at page 2, lines 30-31).**

Claim 12 recites the method of claim 11 that includes making said payment through the registry (**'260 patent at col. 26, lines 57-62 (cited by Office in the 1/05 anticipation rejection**

by the '260 patent); see, e.g., specification at page 2, lines 30-31, see also page 30, line 19 to page 31, line 2, page 32, lines 7-12, page 33, lines 1-6).

Claim 13 recites the method of claim 11 in which the object is a work of authorship, and the encoding adds a generally imperceptible level of noise to the object as it is perceived by a consumer thereof **(see commentary above for setting level of embedded identification signal so that it is at an imperceptible level, see, e.g., specification at page 8, lines 8-15).**

Claim 14 recites the method of claim 11 in which the registry comprises a database accessible through the internet **(‘260 patent at col. 91, lines 1-10; see specification, at page 7, lines 18-21, page 22, lines 21-25, page 34, lines 4-30).**

Claim 26 recites a method of altering a music signal to steganographically insert plural bits of watermark data therein, characterized by steganographically inserting at least a first group of said bits for benefit of an end-user of the music signal by imperceptibly altering audible attributes of the music signal **(‘260 patent at col. 32, lines 5-34, and col. 52, line 63 to col. 53, line 11; see, for example, “private code” for user at col. 32, line 30, which is in addition to the copyright flag and identification information described at col. 27, lines 45-52; see specification at page 3, lines 24-25)**, inserting a second group of bits different than the first for benefit of an artist whose music is encoded by said music data **(‘260 patent col. 3, lines 56-59, col. 27, lines 45-52, col. 53, lines 3-6, and col. 94, lines 28-47; see, for example, the “copyright flag” at col. 27, line 49 and “names of owners” and “ownership identification” at col. 53, lines 1-5; see specification at page 3, lines 25-26)**, inserting a third group of bits different than the first two for benefit of a distributor of the music data **(‘260 patent at col. 3, lines 58-59 (index exact sale and distribution information), col. 27, lines 49-52, and col. 52, line 63 to col. 53, line 11 (pricing information, billing information and the like); see specification at page 3, lines 26-28**, and storing in a registry accessible to the end user an association between information about the music data and at least a portion of the plural bits

(‘260 patent at col. 52, line 67, and col. 90, line 66 to col. 91, line 4, which is applicable to audio at col. 95, lines 33-36); see specification at page 7, line 16 to page 8, line 5.

Claim 27 recites the method of claim 26 including storing in the registry an association between the first group of bits and an internet address of a web site accessible by end-users of the music signal, the registry providing the web site address in response to receiving at least the first group of bits **(‘260 patent Fig. 27 and col. 63, lines 16-17, in which “indices” refers to an index to a registry; see also, ‘260 patent at col. 91, lines 2-9; see specification at page 7, line 16 to page 8, line 5 (particularly page 7, lines 25-27 and page 34, lines 4-30).**

Claim 28 recites the method of claim 26 in which the second group of bits includes bits representing a unique identifier for the music signal, permitting machine identification of the signal and royalty credit to the artist **(‘260 patent col. 3, lines 56-59 (identify the material...and to index exact sale and distribution information), col. 52, line 63 to col. 53, line 11 (pricing information, billing information and the like); see specification at page 7, line 16 to page 8, line 5 (in particular, page 7, lines 25-27, and page 2, lines 5-13).**

Claim 29 recites the method of claim 26 in which the third group of bits represents usage restrictions to which audio appliances are responsive, thereby driving distribution of additional copies of the music signal **(‘260 patent at col. 27, lines 36-40; see specification at page 8, lines 1-2 and page 9, line 14 to page 11, line 10).**

Claim 91 recites the method of claim 1 wherein the payment is credited for entertainment content provided to the user in response to processing at least a portion of the plural bit auxiliary data **(‘260 patent at col. 27, lines 38-39 (“incrementing program specific billing meters”), col. 90, line 62 to col. 91, line 12; see specification at page 2, lines 5-13, and page 28, lines 24-29).**

Claim 92 recites the method of claim 91 wherein the entertainment content is different from the encoded source material and is provided from a location remote from the steganographic decoder (**'260 patent Fig. 27 and col. 63, lines 6-22, see, e.g., specification at page 29, line 28 to page 30, line 10).**

Claim 93 recites the method of claim 8 wherein at least a portion of the plural bits are used to obtain an address of a web site related to the audio source material, and at least a portion of the plural bits are used to identify the audio source material (**'260 patent Fig. 27 and col. 63, lines 6-22; col. 92, lines 21-24 ("item field), and col. 94, lines 7-8 ("IP address"); see specification at page 7, line 16 to page 8, line 5, and page 34, lines 4-30).**

Claim 94 recites the method of claim 11 wherein the transaction comprises providing content related to the object to a user, and the payment comprises payment associated with providing the content related to the object to the user (**'260 patent at col. 91, line 11; col. 27, lines 38-41, col. 26, lines 57-62; see, e.g., specification at page 31, lines 3-31).**

Date: August 31, 2009

CUSTOMER NUMBER 23735

Phone: 503-469-4800
FAX 503-469-4777

Respectfully submitted,
DIGIMARC CORPORATION

By /Joel R. Meyer/
Joel R. Meyer
Registration No. 37,677